

What is Claimed is:

1. An imaging system comprising:

infrared ray illuminating means for radiating an infrared ray;

imaging means for taking an image of a place illuminated by the infrared ray illuminating means and converting the image into an electric signal; and

an image processor for varying signal accumulating time of the imaging means at a predetermined cycle and continuously and periodically forming images of different light exposure amount, wherein

the image processor sets a mask for adjusting a brightness level between the images of different light exposure amount.

2. The imaging system, according to Claim 1, wherein

the image processor sets the mask on the image of the higher brightness level, of the images of different light exposure amount.

3. The imaging system, according to Claim 1 or 2, wherein

the image processor adjusts the brightness level, according to the brightness of the mask or a format of each dot forming the mask.

4. The imaging system, according to Claims 1 to 3, wherein

the image processor changes the mask, according to an average gradation on the whole screen formed by the images of different light exposure amount, hence to adjust the brightness level.

5. The imaging system, according to one of Claims 1 to 4, wherein

the infrared ray illuminating means, the imaging means, and the image processor are provided in a car,

the infrared ray illuminating means illuminates an outside of the car with the infrared ray, and

the imaging means takes an image of the outside of the car.